

Paper

# Childhood Circumcision in Northern Ireland: A barometer of the current practice of general paediatric surgery

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## ABSTRACT

**Purpose:** Studies undertaken in England and Scotland have identified a decrease in the number of circumcision operations being performed during childhood. The aims of this study were two-fold. Firstly, to determine the trend in circumcision operations performed in boys in Northern Ireland over a ten year period. Secondly, to compare the number of operations performed by paediatric surgeons with the number performed by general surgeons over the same period.

**Method:** Data were collected from the Northern Ireland Department of Health and Social Services and Public Safety. A retrospective analysis was conducted of the number of circumcisions performed in boys aged between 0 and 13 years for the year beginning 1<sup>st</sup> September 1991 to the 1<sup>st</sup> of September 1992 and for the year beginning 1<sup>st</sup> September 2001 until the 1<sup>st</sup> of September 2002.

**Results:** 769 circumcisions were performed in the year 1991 to 1992 compared with 264 in the year 2001 to 2002, representing a 66% decrease. In the ten year study period, the number of circumcisions performed by general surgeons fell by 71% whilst specialist paediatric surgeons performed 56% less.

**Conclusions:** The decrease in rates of circumcision in boys aged 0 to 13 years in Northern Ireland is consistent with trends in the remainder of the United Kingdom. The results also suggest a greater decrease in the proportion of circumcisions being performed by general surgeons in district general hospitals compared to those performed by paediatric surgeons.

**KEYWORDS:** Circumcision, paediatric surgery, general surgery

## INTRODUCTION

Circumcision, arguably, is one of the oldest and most widely practised surgical procedures in the world.<sup>1</sup> From its early origins in religious and tribal rituals, circumcision continues to be practised today worldwide. In recent times, there has been growing concern that too many circumcisions are carried out unnecessarily in neonates and boys. Several studies undertaken in England and Scotland have identified a decrease in the number of operations being performed.<sup>2,3</sup> To date there has been no review of trends in circumcision rate within Northern Ireland.

The aim of this study is to review the numbers of circumcision procedures performed in boys aged 0-13 years in Northern Ireland over a ten year period and to analyse the trend in the procedures performed by paediatric surgeons and general surgeons over the same period.

## METHOD

Data were collected from the Department of Health, Social Services and Public Safety in Northern Ireland. The total number of circumcisions performed in Northern Ireland in the 0 to 13-year age group during periods 1<sup>st</sup> September 1991 to 1<sup>st</sup> September 1992 and 1<sup>st</sup> September 2001 to 1<sup>st</sup> September 2002 was ascertained. Data from the Northern Ireland Census Report<sup>4</sup> were used to calculate the percentage circumcision rates during these years.

Figures specific to each hospital in which the circumcisions had been performed were also available, allowing comparison between the number of circumcisions performed by general surgeons and paediatric surgeons over the same period.

## RESULTS

A total of 769 circumcisions were performed in the year 1991-1992, representing 5.7% of boys aged 0-13 years. A total of 264 circumcisions were performed in the year 2001-2002, representing 1.9% of boys aged 0-13 years. Overall, this signifies a 66% decrease in the number of circumcisions performed in the ten year period.

In the year 1991-1992, circumcisions were performed in eleven hospitals throughout Northern Ireland. In total, 257 (33%) operations were performed by paediatric surgeons and 518 (67%) by general surgeons during this year.

In the year 2001-2002 circumcisions were performed in 9 hospitals. Overall, 113 (43%) were performed by paediatric surgeons and 151 (57%) by general surgeons. The number of circumcisions carried out by general surgeons dropped by

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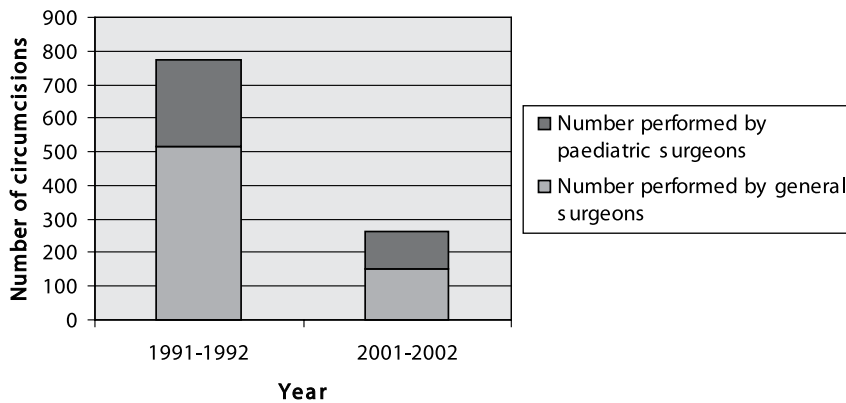


Fig 1. Circumcision Trends in Northern Ireland over the ten year study period

71% in the 10 year period compared with a 56% reduction by paediatric surgeons.

## DISCUSSION

The decrease in rates of circumcision seen in this study is consistent with trends noted across the remainder of the UK. Furthermore, circumcision rates in boys within Northern Ireland are currently in line with the target of 2% suggested by Rickwood et al.<sup>2</sup> However, there are a number of limitations to this study. The retrospective data were derived from DHSSPS statistics, a potential source of bias. Unfortunately, the indications for circumcision were not available, making it impossible to evaluate the impact of changes in disease prevalence or trends in non-therapeutic circumcision during the study period. What many surgeons would have considered in the past to be “phimosis” (and treated by circumcision) was in fact physiological non-retractile foreskin. Therefore, the most probable explanation for the reduction in circumcision rate is the improved understanding of the natural history of physiological non-retractile foreskin and the pathophysiology of phimosis.

This study also indicates that the proportion of circumcisions in Northern Ireland being performed during childhood by general surgeons has decreased substantially over the

study decade. Circumcision and other general paediatric surgical procedures have traditionally fallen within the remit and interests of both general and paediatric surgeons. Recent increases in the workload of consultant paediatric surgeons have been noted by the British Association of Paediatric Surgeons as fewer general surgeons continue to perform general paediatric surgery.<sup>5</sup> The observed decrease in circumcisions being performed by general surgeons may be due to recent changes in general surgical training, which have reduced opportunities for surgeons in training to acquire experience in paediatric surgery.<sup>6</sup> This highlights an important

and potentially worrying trend in the distribution of general paediatric surgery provision in the Province.

The authors have no conflict of interest

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